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In math class we had to make a stained glass art project. You may ask how is a stained glass art project related to math, well first we had to plot 11 equations. The lines for the equations were the base for this project, meaning we had to build off of them. We were told to make art that was meaningful and art that people could relate to. A lot of groups used paint, some used glitter and even chalk. The art and the math are clearly related because the math was the base, so we could have an idea of what to create as the art. After finishing the art we had to make an explanation or in a more fancy term a *Synopsis.*

I chose one art piece that was not my own to look at and think deeply about. This art piece was titled Broken Mind. On one half of this piece of art there are organized triangles and shapes symbolizing organization. But, on the other side is something that looks like shattered glass, symbolizing a broken mind. A lot of times in my life I find that when you do have a broken mind, not an organized one it is harder to finish things or even begin them. This piece of art also reminded me to keep an organized mind rather than a broken one. The broken part of this project reminded me of my dirty room, while the organized part reminded me of my beautiful binder. The way the organization part of it looked 3d made me think of how my organization should show off not my clutter or broken mind. Though this art piece was really simple it made me think about what I do and how I can change what I do.

In my own art piece, there was a lot of math represented by the lines. The place where a lot of lines connect on the y-axis is a common y-intercept in the equations, because that is where they all are when y is 0, this made it look like a major intersection. The 12 point on the y-axis was a major intersection, this is clearly seen in the equations because 3 equations include the +12 part which symbolizes the center of it as being 12 or the y-intercept of it as being 12. If when x was increasing, so was y then the line had positive slope if y was decreasing when x was increasing the line had negative slope, this made a line look like it was going up, or look like it was going down. One line that has the exact opposite slope of another line makes it an opposite line, this creates a sort of X between them. For example the equation $y=x+12$ and the equation $y= -x+12$ both have opposite slope and the same y-intercept this create a perfect meeting point for both opposite lines on the y-axis. Since it was hard to make the line straight from the equation we made a table with two points, after plotting both points we made a straight line from them.

In each piece of art there was a chevron running through, across,or in the middle of the origin. The way the chevron appeared hinted on what the group might have used as their increment separation measurements for the x and y, heres why. The closer the increments for x were, the steeper or thinner the chevron was. If the increments for y were closer the object was wider. This is because you are sort of squeezing the object on an axis by packing more points on the axis. If a group had the same length in the increments for x and y there chevron was proportional,not too skinny and not too wide, just perfect. Scale factor showed how graphs can look different, even when they share the same data.

To turn the equation into a table we used the equation Y=MX+B, first off we started with figuring out what the y-intercept was, or B as used in the equation. To do this we broke down the equation into the 4 parts and found that the number being added or subtracted was the y-intercept, which is what we put down on our table next to 0. Then we added to that one times the slope or the number being multiplied, this gave us the second point. To graph, we found the two points on the graph and created a straight line from then on. Graphing the lines created an art and it also was made by math. This project helped showed that math can actually create a body for art, so this is how art and math are related. This project clarified many things to me about graphs, tables, and equations and it also helped me create a bridge between art and math.